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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,519	07/23/2003	Sanjay Kotha	US 1330/02	7440
7590 03/24/2006				
Law Office-Dinesh Agarwal, P.C. Suite 330 5350 Shawnee Road Alexandria, VA 22312			EXAMINER PATTERSON, MARIE D	
			ART UNIT 3728	PAPER NUMBER

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/624,519	KOTHA ET AL.	
	Examiner	Art Unit	
	Marie Patterson	3728	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-5, 7, 8, 10-17, 19-32, 34-40, 42-49, 51-61, 63-69, 71-78, 80-87, and 89-100 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-5, 7, 8, 10-17, 19-32, 34-40, 42-49, 51-61, 63-69, 71-78, 80-87 and 89-100 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☒ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 2/15/06 + 10/14/05

4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7, 8, 10-17, 19-26, 95, and 98-100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Christensen '815 in view of Fuchs (6527972).

Christensen '815 shows a cushion substantially as claimed except for the exact particles in the fluid. Fuchs teaches that it is well known to have bilayers or multiple layers of coatings on particles (column 4 lines 48-53 and column 7 lines 50-60) and teaches the use of the claimed materials and size of particles as claimed.. It would have been obvious to use the magnetorheological material taught by Fuchs for the fluid and/or particles in the cushion of Christensen '815 to minimize the variance in force required by the device over a given temperature range, i.e. to reduce the effect of temperature change on the performance of the device enhance fluid stability, reduce degradation, increase material strength, improve fatigue resistance and the reduce settling.

In reference to claim 95, it is well known to use particles of differing diameters in a magnetorheological fluid.

3. Claims 27-32, 34-40, 42-49, 51-61, 63-69, 71-78, 80-87, 89-94, 96, and 97 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demon (5813142) in view of Christensen '815 and Fuchs (6527972) .

Demon shows a cushioned shoe sole with a bladder which is responsive to a control system (300) which responds to sensors (100) to change the support provided by the bladders substantially as claimed except for the bladder and control system being magnetorheological. Christensen '815 teaches the use of a magnetorheological system for responding to forces and weight by adjusting the support provided by a bladder. Fuchs teaches that it is well known to have bilayers or multiple layers of coatings on particles (column 4 lines 48-53 and column 7 lines 50-60) and teaches the use of the claimed materials and size of particles as claimed.. It would have been obvious to use the magnetorheological material taught by Fuchs for the fluid and/or particles in the cushion of Christensen '815 and to use magnetorheological fluid and system as taught by Christensen '815 in the shoe of Demon to reduce the moving mechanical elements of the shoe and to make the shoe sole system smaller.

In reference to claims 96 and 97, it is well known to use particles of differing diameters in a magnetorheological fluid.

Response to Arguments

4. Applicant's arguments filed 2/15/06 have been fully considered but they are not persuasive.

In response to applicants' argument that Fuchs is from a nonanalogous art, this is not true. Fuchs is clearly directed towards a fluid which is a magnetorheological fluid intended for use in applications directed towards shock absorbing, campening and vibration control which are all categories in which footwear manufacturers are constantly concerned with and would obviously look to any material directed towards such. Fuchs

clearly states that applications of use cover a range from exercise equipment, (which includes exercise footwear and/or prosthesis) to optical lens polishing. It is clear that the intended use of the fluid of Fuchs is a wide range. Fuchs is analagous art, is reasonably expected to be known by the ordinary skilled since Fuch deals with damping material as in the Christensen reference.

In response to applicants' argument that Fuchs teaches a gel, not a fluid, is not persuasive because gel is a fluid.

In response to Applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgement on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. In re McLaughlin, 443 F.2d 1392; 170 USPQ 209 (CCPA 1971). The motivation for using Fuchs material in Christensen is for its: fluid stability, reduced degradation, increased material strength, improved fatigue resistance and reduced settling in addition to the example of temperature varianc epointed out in the previous rejection.

5. Applicant's arguments with respect to claims 1-5, 7, 8, 10-17, 19-32, 34-40, 42-49, 51-61, 63-69, 71-78, 80-87, and 89-100 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

1. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Other useful information can be obtained at the PTO Home Page at www.uspto.gov.

In order to avoid potential delays, Technology Center 3700 is encouraging FAXing of responses to Office Actions directly into the Center at (572)272-8300 **(FORMAL FAXES ONLY)**. Please identify Examiner Marie Patterson of Art Unit 3728 at the top of your cover sheet.

Any inquiry concerning the MERITS of this examination from the examiner should be directed to Marie Patterson whose telephone number is (571) 272-4559. The examiner can normally be reached from 6AM - 4PM Mon-Wed.



Marie Patterson
Primary Examiner
Art Unit 3728